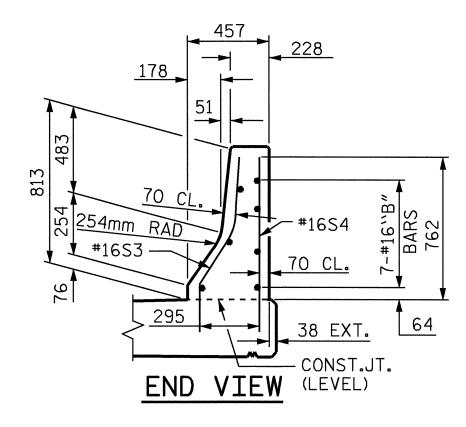


PLAN



BARRIER RAIL - END OF RAIL DETAILS

NOTES

THE BARRIER RAIL IN A CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THE UNIT HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 20.7 MPa.

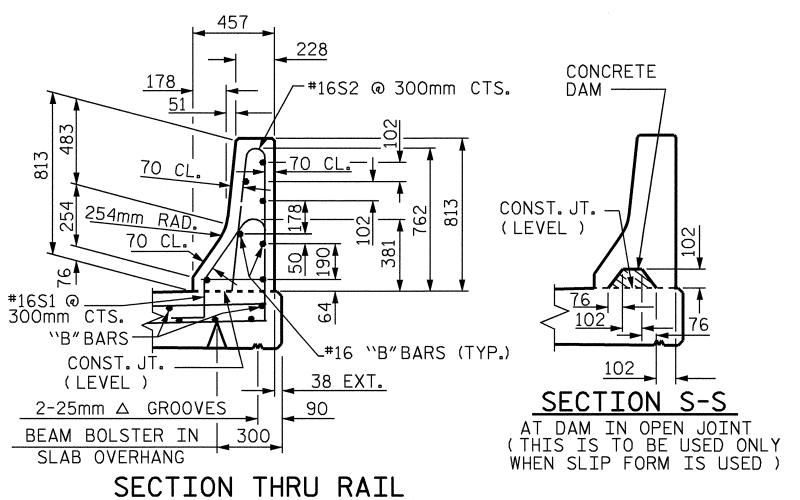
WHEN EVAZOTE JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

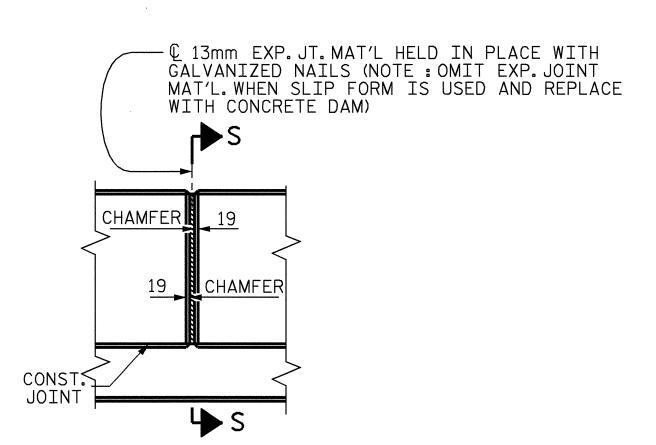
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #16S3 THRU #16S6 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE SPECIAL PROVISIONS. THE YIELD LOAD FOR THE #16S3 THRU #16S6 BARS IS 82.7 kN. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

VERTICAL GROOVED CONTRACTION JOINTS, 12mm IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 6.1m IN LENGTH AND NO JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.5m IN LENGTH.

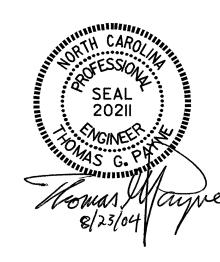
THE #16 S1 & S2 BARS MAY BE SHIFTED SLIGHTLY IN THE AREA OF THE GUARDRAIL ANCHOR ASSEMBLY TO CLEAR ASSEMBLY BOLTS.





ELEVATION AT EXPANSION JOINTS

BARRIER RAIL DETAILS



BILL OF MATERIAL FOR CONCRETE BARRIER RAIL ONLY BAR NO. SIZE TYPE LENGTH WEIG ** S1 1028 **16 1 1420 2266 ** S2 1028 **16 2 1580 2523 ** S3 12 **16 3 1020 19 ** S4 12 **16 STR 960 18 ** B11 56 **16 STR 960 18 ** B12 42 **16 STR 6480 422 ** B13 14 **16 STR 5880 128 ** B14 168 **16 STR 8880 2315 ** B15 14 **16 STR 7680 167	530	203	57mm RAD.	485	172	48mm
# B1LL OF MATERIAL FOR CONCRETE BARRIER RAIL ONLY BAR NO. SIZE TYPE LENGTH WEIG # \$1 1028 #16 1 1420 2266 # \$2 1028 #16 2 1580 2523 # \$3 12 #16 3 1020 19 # \$4 12 #16 STR 960 18 # \$11 56 #16 STR 960 18 # \$12 42 #16 STR 6480 422 # \$13 14 #16 STR 5880 128 # \$14 168 #16 STR 8880 2315 # \$15 14 #16 STR 7680 167	_	1				
* \$2		AR DI	MENSI			
** S2 1028 **16 2 1580 252 ** S3 12 **16 3 1020 19 ** S4 12 **16 STR 960 18 ** B11 56 **16 STR 4420 384 ** B12 42 **16 STR 6480 422 ** B13 14 **16 STR 5880 128 ** B14 168 **16 STR 8880 2315 ** B15 14 **16 STR 7680 167				BARRII	ER RAIL	ONLY
**S3 12 **16 3 1020 19 **S4 12 **16 STR 960 18 **B11 56 **16 STR 4420 384 **B12 42 **16 STR 6480 422 **B13 14 **16 STR 5880 128 **B14 168 **16 STR 8880 2315 **B15 14 **16 STR 7680 167	BAR	NO.	SIZE	3ARRII TYPE	ER RAIL LENGTH	ONLY WEIG
* S4 12 #16 STR 960 18 * B11 56 #16 STR 4420 384 * B12 42 #16 STR 6480 422 * B13 14 #16 STR 5880 128 * B14 168 #16 STR 8880 2315 * B15 14 #16 STR 7680 167	BAR * S1	NO. 1028	SIZE #16	BARRII TYPE 1	ER RAIL LENGTH 1420	
* B11 56 #16 STR 4420 384 * B12 42 #16 STR 6480 422 * B13 14 #16 STR 5880 128 * B14 168 #16 STR 8880 2315 * B15 14 #16 STR 7680 167	* S1 * S2	NO. 1028 1028	#16 #16	BARRII TYPE 1 2	ER RAIL LENGTH 1420 1580	ONLY WEIGH 2266 2521
** B12 42 **16 STR 6480 422 ** B13 14 **16 STR 5880 128 ** B14 168 **16 STR 8880 2315 ** B15 14 **16 STR 7680 167 ** EPOXY COATED	* \$1 * \$2 * \$3	NO. 1028 1028 12	#16 #16 #16	TYPE 1 2 3	1420 1580 1020	ONLY WEIGH 2266 2521 19
** B13 14 **16 STR 5880 128 ** B14 168 **16 STR 8880 2315 ** B15 14 **16 STR 7680 167 ** EPOXY COATED	* \$1 * \$2 * \$3	NO. 1028 1028 12	#16 #16 #16	TYPE 1 2 3	1420 1580 1020	ONLY WEIGH 2266 2521 19
* B14	* \$1 * \$2 * \$3 * \$4	NO. 1028 1028 12 12	#16 #16 #16 #16	TYPE 1 2 3 STR	1420 1580 1020 960	ONLY WEIG 2266 2521 19 18
* B15	* \$1 * \$2 * \$3 * \$4 * B11	NO. 1028 1028 12 12 12	#16 #16 #16 #16 #16	TYPE 1 2 3 STR	1420 1580 1020 960	ONLY WEIG 2266 2521 19
* EPOXY COATED	* S1 * S2 * S3 * S4 * B11 * B12	NO. 1028 1028 12 12 12 56 42	#16 #16 #16 #16 #16 #16	TYPE 1 2 3 STR STR STR	1420 1580 1020 960 4420 6480	ONLY WEIG 2266 2521 19 18
	* \$1 * \$2 * \$3 * \$4 * \$11 * \$12 * \$13	NO. 1028 1028 12 12 12 56 42 14	#16 #16 #16 #16 #16 #16 #16	TYPE 1 2 3 STR STR STR STR	1420 1580 1020 960 4420 6480 5880	ONLY WEIG 2252 19 18 384 422 128
	* S1 * S2 * S3 * S4 * B11 * B12 * B13 * B14	NO. 1028 1028 12 12 12 14 168	#16 #16 #16 #16 #16 #16 #16 #16	TYPE 1 2 3 STR STR STR STR STR	1420 1580 1020 960 4420 6480 5880 8880	ONLY WEIG 2266 2521 19 18 384 422 128 2315
i e e e e e e e e e e e e e e e e e e e	* S1 * S2 * S3 * S4 * B11 * B12 * B13 * B14	NO. 1028 1028 12 12 12 14 168	#16 #16 #16 #16 #16 #16 #16 #16	TYPE 1 2 3 STR STR STR STR STR	1420 1580 1020 960 4420 6480 5880 8880	ONLY WEIG 2266 2521 19 18 384 422
	* S1 * S2 * S3 * S4 * B11 * B12 * B13 * B14 * B15	NO. 1028 1028 12 12 12 56 42 14 168 14	#16 #16 #16 #16 #16 #16 #16 #16 #16	TYPE 1 2 3 STR STR STR STR STR	1420 1580 1020 960 4420 6480 5880 8880	ONLY WEIG 2266 2521 19 18 384 422 128 2315

BAR TYPES

PROJECT NO. R-2206B

LINCOLN COUNTY

STATION: 123+38.105 -L-

CLASS AA CONCRETE

CONCRETE BARRIER RAIL 313.724 METERS

78.7 CU. METER

SHEET 2 OF 2

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

	REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	S-25	
1			3			TOTAL SHEETS	
2			4			86	
STR.	#1						

ASSEMBLED BY : M. J. OSTRISHKO DATE : 4-2-0|
CHECKED BY : E. G. ALLEN DATE : 4-20-0|

DRAWN BY : ARB 5/87 REV. 7/17/98 RWW/LES
CHECKED BY : SJD 9/87 REV. 10/17/00 RWW/LES